

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0207590F Seek Eagle				PROJECT 4037		
COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4037 SEEK EAGLE Certifications	15,755	18,767	23,133	19,645	17,950	17,164	19,130	18,756	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) A. Mission Description
The Air Force has a variety of combat aircraft and numerous stores (munitions, missiles, fuel tanks, electronic countermeasures pods, etc.). Aircraft carry these stores in countless different loading combinations determined by operational scenarios, missions, and tactics. Loading configurations change as operational plans and tactics change, and as new aircraft and stores are developed and produced. Before operational use, the Air Force must certify these configurations for safe loading, carriage, and separation (jettison and normal release), and must verify ballistics accuracy under the user-certified carriage and employment parameters. The Air Force SEEK EAGLE program completes these certifications through any combination of ground and flight testing, wind tunnel testing, advanced testing software, and engineering analysis. Over 700 aircraft-store combinations exist to be certified, with new ones added on a regular basis. Depending upon the complexity, certification takes from months to years. The SEEK EAGLE program is also responsible for insertion of new and emerging technologies into the SEEK EAGLE process and providing resources for sustainment of a viable Air Force aircraft-store certification capability. Electronic Technical Orders are developed through the Combat Weapons Delivery Software (CWDS), creating cost savings by eliminating paper technical orders. SEEK EAGLE funds are currently budgeted to support certification for new weapons programs including F-22, Joint Strike Fighter (JSF), Sensor Fuzed Weapon (SFW), Wind Corrected Munitions Dispenser (WCMD), Joint Direct Attack Munition (JDAM), Joint Air to Surface Standoff Missile (JASSM), Joint Standoff Weapon (JSOW), AIM-9X, AIM-120 C-5 (AMRAAM), and many other inventory stores on inventory aircraft.

(U) FY 1998 (\$ in Thousands):

- (U) \$600 Initiated development of F-22 data and engineering models to use for follow-on F-22 weapons certification
- (U) \$1,810 Continued/completed various aircraft load/separation prediction capabilities using Applied Computational Fluid Dynamics (ACFD)
- (U) \$2,170 Initiated/continued/completed various automated Technical Orders/mission planning tools using CWDS
- (U) \$11,175 Initiated/continued/completed various aircraft-store certifications on fighter and bomber aircraft
- (U) \$15,755 Total

Project 4037
Page 1 of 6 Pages
Exhibit R-2 (PE 0207590F)

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 1999
BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0207590F Seek Eagle	PROJECT 4037

(U) FY 1999 (\$ in Thousands):

- (U) \$3,094 Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification
- (U) \$2,300 Initiate/continue/complete various automated Technical Orders/mission planning tools using CWDS
- (U) \$2,400 Continue/complete various aircraft load/separation prediction capabilities using Applied Computational Fluid Dynamics (ACFD)
- (U) \$8,978 Initiate/continue/complete various aircraft-store certifications on fighter and bomber aircraft
- (U) \$1,500 Extended range JDAM testing using CONDOR strap-on wing kit (Longshot testing)
- (U) \$495 Identified as a source for SBIR
- (U) \$18,767 Total

(U) FY 2000 (\$ in Thousands):

- (U) \$3,344 Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification
- (U) \$2,350 Initiate/continue/complete various automated Technical Orders/mission planning tools using CWDS
- (U) \$2,500 Continue/complete various aircraft load/separation prediction capabilities using Applied Computational Fluid Dynamics (ACFD)
- (U) \$14,939 Initiate/continue/complete various aircraft-store certifications on fighter and bomber aircraft
- (U) \$23,133 Total

(U) FY 2001 (\$ in Thousands):

- (U) \$3,356 Continue development of F-22 data and engineering models to use for follow-on F-22 weapons certification
- (U) \$2,400 Initiate/continue/develop/complete various automated Technical Orders/mission planning tools using CWDS
- (U) \$2,600 Continue/complete various aircraft load/separation prediction capabilities using Applied Computational Fluid Dynamics (ACFD)
- (U) \$11,289 Initiate/continue/complete various aircraft-store certifications on fighter and bomber aircraft
- (U) \$19,645 Total

(U) **B. Budget Activity Justification:**
The RDT&E Budget Activity is 7, Operational Systems Development, because the program supports fielded systems.

Project 4037

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)					DATE February 1999																																																												
BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0207590F Seek Eagle				PROJECT 4037																																																												
<p>(U) C. <u>Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="text-align: right; width: 10%;"><u>FY 1998</u></th> <th style="text-align: right; width: 10%;"><u>FY 1999</u></th> <th style="text-align: right; width: 10%;"><u>FY 2000</u></th> <th style="text-align: right; width: 10%;"><u>FY 2001</u></th> <th style="text-align: right; width: 10%;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY1999 PB)</td> <td style="text-align: right;">16,909</td> <td style="text-align: right;">17,590</td> <td style="text-align: right;">22,285</td> <td style="text-align: right;">20,019</td> <td style="text-align: right;">Cont.</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: right;">17,716</td> <td style="text-align: right;">19,090</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: right;">-736</td> <td style="text-align: right;">-323</td> <td></td> <td></td> <td></td> </tr> <tr> <td> b. SBIR</td> <td style="text-align: right;">-72</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td style="text-align: right;">-113</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogramming</td> <td style="text-align: right;">-1,040</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY1999 PB</td> <td></td> <td></td> <td style="text-align: right;">848</td> <td style="text-align: right;">-374</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY2000 PB</td> <td style="text-align: right;">15,755</td> <td style="text-align: right;">18,767</td> <td style="text-align: right;">23,133</td> <td style="text-align: right;">19,645</td> <td style="text-align: right;">Cont.</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) Significant Program Changes: FY98: \$1,040 from SEEK EAGLE project has been reprogrammed to Armament Ordnance Development (PE 0604602F, Project 4696) to correctly align the Munitions Material Handling Equipment project in the same program element. FY99: \$1,500 Congressional plus-up for Longshot testing; \$495 identified as a source for SBIR. FY00: \$848 net add for additional certification flight tests.</p>							<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY1999 PB)	16,909	17,590	22,285	20,019	Cont.	(U) Appropriated Value	17,716	19,090				(U) Adjustments to Appropriated Value						a. Congressional/General Reductions	-736	-323				b. SBIR	-72					c. Omnibus or Other Above Threshold Reprogram	-113					d. Below Threshold Reprogramming	-1,040					(U) Adjustments to Budget Years Since FY1999 PB			848	-374		(U) Current Budget Submit/FY2000 PB	15,755	18,767	23,133	19,645	Cont.
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>																																																												
(U) Previous President's Budget (FY1999 PB)	16,909	17,590	22,285	20,019	Cont.																																																												
(U) Appropriated Value	17,716	19,090																																																															
(U) Adjustments to Appropriated Value																																																																	
a. Congressional/General Reductions	-736	-323																																																															
b. SBIR	-72																																																																
c. Omnibus or Other Above Threshold Reprogram	-113																																																																
d. Below Threshold Reprogramming	-1,040																																																																
(U) Adjustments to Budget Years Since FY1999 PB			848	-374																																																													
(U) Current Budget Submit/FY2000 PB	15,755	18,767	23,133	19,645	Cont.																																																												
<div style="display: flex; justify-content: space-between;"> Project 4037 Page 3 of 6 Pages Exhibit R-2 (PE 0207590F) </div>																																																																	

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0207590F Seek Eagle				PROJECT 4037		
(U) D. <u>Other Program Funding Summary (\$ in Thousands)</u>										
Appropriation:	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To <u>Compl</u>	Total <u>Cost</u>
(U) Procurement of Ammunition, AF*										
- P-1 Line JDAM	0	0	0	0	147	0	146	0	0	293
- P-1 Line WCMD	4,012	0	0	0	0	0	136	0	0	4,148
(U) Missile Procurement, AF*										
- P-1 Line JSOW	1,112	10,243	1,150	0	1,033	3,293	1,286	1,286	Cont.	Cont.
- P-1 Line AMRAAM	0	0	0	618	0	0	0	0	0	15,143
- P-1 Line AIM-9 Sidewinder	0	0	0	2,944	5,384	1,966	0	4,330	Cont.	Cont.
- P-1 Line JASSM	0	0	0	6,369	3,414	2,929	3,657	2,925	Cont.	Cont.
* Note: The SEEK EAGLE procurement dollars shown above are appropriated in each weapon's P-1 line.										
(U) E. <u>Acquisition Strategy</u>										
Budget authorization for procurement funds is given directly to the weapon system program offices, who then procure the required certification test articles through the weapon production contract.										
(U) F. <u>Schedule Profile</u>										
Note: The SEEK EAGLE program does not execute in accordance with established acquisition program milestones. Each aircraft-store configuration requested by the user goes through the SEEK EAGLE process by the designated user priority.										
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>		
AIM-120 C-5 (AMRAAM)				X						
AIM-9X				X	X	X		X		
JASSM				X	X	X	X	X		
JSOW	*	X	X		X	X	X	X		
JDAM					X		X			
WCMD	*						X			
* = Completed Event										
X = Planned Event										

Project 4037
Page 4 of 6 Pages
Exhibit R-2 (PE 0207590F)

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE
BUDGET ACTIVITY				February 1999
7 - Operational System Development				PROJECT
PE NUMBER AND TITLE				4037
0207590F Seek Eagle				
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>				
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
(U) Process Sustainment	2,100	2,400	2,500	2,600
(U) F-22 Data & Engineering Models	600	3,094	3,344	3,356
(U) Engineering Analysis	3,350	3,600	4,025	4,250
(U) Flight Testing	6,028	3,628	9,180	5,189
(U) Extended Range JDAM Testing		1,500		
(U) Wind Tunnel Testing	757	950	834	900
(U) Other	2,170	2,300	2,350	2,400
- Ballistic/ Safe Escape Analysis				
- Tech Order/P.C. Floppy Disk				
- Loading Process Development/Verification				
(U) Mission Support	750	800	900	950
(U) Identified as a source for SBIR		495		
(U) Total	15,755	18,767	23,133	19,645
Project 4037				
Page 5 of 6 Pages				
Exhibit R-3 (PE 0207590F)				

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)									DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0207590F Seek Eagle					PROJECT 4037	
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Identified as a source for SBIR							495				495
<u>Product Development Organizations</u>											
Lockheed Martin	C/CPFF	Jul 98	15,648	15,648	0	600	3,094	3,344	3,356	5,254	15,648
<u>Support and Management Organizations</u>											
Mission Support	PO/REO	Continuous	N/A	N/A	8,317	750	800	900	950	Cont.	Cont.
<u>Test and Evaluation Organizations</u>											
46th Test Wing	PO/REO	Continuous	N/A	N/A	78,673	10,678	8,428	12,255	9,739	Cont.	Cont.
AEDC	PO/REO	Continuous	N/A	N/A	12,861	877	950	1,034	1,100	Cont.	Cont.
TBD (CONDOR)	TBD	Jan 99	1,500	1,500	0	0	1,500	0	0	0	1,500
Various	PO/REO	Continuous	N/A	N/A	35,542	2,850	3,500	5,600	4,500	Cont.	Cont.
Government Furnished Property:											
Not Applicable											
Identified as a source for SBIR							495				495
Subtotal Product Development						600	3,094	3,344	3,356	5,254	15,648
Subtotal Support and Management					8,317	750	800	900	950	Cont.	Cont.
Subtotal Test and Evaluation					127,076	14,405	14,378	18,889	15,339	Cont.	Cont.
Total Project					135,393	15,755	18,767	23,133	19,645	Cont.	Cont.
Project 4037											
Page 6 of 6 Pages											
Exhibit R-3 (PE 0207590F)											